

SUBJECT CODE NO: -BB-2426

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (CBCGS)(Pattern 2022) S.Y SEM III

Examination November / December 2025

Chemistry-VII Organic Chemistry

[Time: 1:30 Hours]

[Max. Marks: 40]

Please check whether you have got the right question paper.

N. B

- 1) Attempt all questions.
- 2) Figures to the right indicates marks.

Q1 Write the correct option for each of the following questions.

10

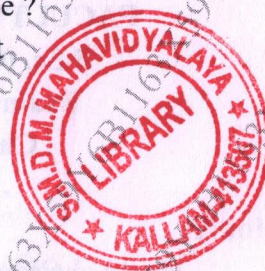
- 1) What is the common name of Propanone ?
 - a) Butanone
 - b) Acetaldehyde
 - c) Acetone
 - d) Formaldehyde
- 2) What is the product of witting reaction ?
 - a) Alcohol
 - b) Alkene
 - c) Aldehyde
 - d) Ketone
- 3) How are carboxylic acids prepared from ester?
 - a) Oxidation
 - b) Reduction
 - c) Hydrolysis
 - d) Halogenation
- 4) What is the product of Reformatsky reaction ?
 - a) β -hydroxyester
 - b) α -hydroxyacid
 - c) Aldehyde
 - d) Amide
- 5) The amine which does not react with acetyl chloride is _____
 - a) CH_3NH_2
 - b) $(\text{CH}_3)_2\text{NH}$
 - c) $\text{C}_2\text{H}_5\text{NH}_2$
 - d) $(\text{CH}_3)_3\text{N}$
- 6) What is the product of the reaction of an alkyl halide with excess of ammonia ?
 - a) Primary amine
 - b) alcohol
 - c) amide
 - d) acetamide
- 7) Which reaction is used to introduce an amino group into the pyridine ring?
 - a) Perkin reaction
 - b) Sandmayer reaction
 - c) Chichibabin reaction
 - d) Reformatsky reaction
- 8) How is ethyl acetoacetate typically prepared?
 - a) Aldol condensation
 - b) Claisen condensation
 - c) Cannizzaro reaction
 - d) Fridel craft reaction

9) Which confirmation of cyclohexane is the most stable ?

- a) Boat
- b) Twist boat
- c) Chair
- d) Planar

10) Why active methylene compounds are acidic?

- a) Due to the presence of only alkyl group.
- b) Due to presence of halogen
- c) Due to the absence of electron withdrawing group.
- d) Due to resonance stabilization of enolate ion.



Q2 Attempt any five from the following.

15

- a) Give the preparation of aldehyde from acid chloride.
- b) What is the action of HCN on aldehyde?
- c) Explain the acidity of carboxylic acid.
- d) Describe nitration of aniline.
- e) Discuss classification of Heterocyclic compounds.
- f) Explain axial and equatorial hydrogen atoms in cyclohexane.
- g) Why pyridine is more basic than pyrrole?
- h) What are active methylene compounds? Give examples.

Q3 Attempt any three of the following.

15

- a) Explain aldol condensation with mechanism.
- b) Write a note on basicity of pyrrole.
- c) Describe Hell-volhard-Zelinsky reaction.
- d) Explain Diazotization reaction with mechanism
- e) Describe Heat of combustion of cyclohexane.
- f) Give preparation of Diethyl malonate from chloroacetic acid.